

STEREO MOC Status Report
Time Period: 2014:181 - 2014:187

STEREO Ahead (STA) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

- On day 185, the DSS-55 support was cancelled due to antenna being declared red. No other stations were available for tracking. On the next support later that day at 1430z, SSR pointers were repositioned to prevent SSR data loss. See DR #M108128 for more information.
- On day 186, during the DSS-55 support, turbo decoder lock was lost at 1059z. This anomaly resulted in the loss of one frame of SSR data.

2. The following spacecraft/instrument events occurred during this week:

- On day 182, IMPACT unsuccessfully loaded a flight software patch to LET to reduce telemetry generation in preparation for HGA side lobe operations.
- On day 187, final preparations for testing the solar conjunction configuration on the Ahead observatory were conducted. The PLASTIC and IMPACT instrument suites ramped down the necessary high voltages and the SECCHI COR1 and 2 covers were closed. A flight software patch was loaded to the IMPACT IDPU in preparations for the reduced data rates on HGA side lobes. The remaining science data on the SSR was played back. The necessary S/C bus telemetry configurations for side lobe operations were loaded to C&DH RAM and verified consisting of MOps macro release 1.1.22. In accordance with the solar conjunction entry procedure, a final snapshot of the analog diagnostic data in the data summary table was dumped. The PLASTIC and IMPACT instrument suites were powered down at 1830z, the SECCHI instrument at 1835z, and the SWAVES instrument at 1840z. Reduced gyro operations are continuing and G&C control gains were adjusted for lack of SECCHI GT input. The S/C was configured for the first side lobe use on the HGA for the next track on day 188. In between DSN tracks, the spacecraft was configured for the solar conjunction

side lobe emergency communication data rates, 633 bps downlink and 125 bps uplink, broadcasting S/C bus telemetry. The Ahead HGA feed temperature is continuing to track according to predictions, currently at 108 degrees C.

- The average daily SSR playback volume for Ahead was 5.4 Gbits during this week.

STEREO Behind (STB) Status:

1. The following Ground System anomalies/events occurred during this reporting period:

- On day 181, during the DSS-14 support, telemetry lock was lost intermittent at BOT at 1840z due to a sub reflector anomaly. To increase the downlink received power, the downlink rate was changed to 360 kbps and SSR pointers were repositioned. This anomaly resulted in the SECCHI partition 19 to fill beginning at 182-0657z for 19 minutes. See DR #G115182 for more information.
- On day 186, during the DSS-54 support, turbo decoder lock was lost intermittently between 0853z through 1208z. This anomaly resulted in the loss of 10 frames of SSR data.

2. The following spacecraft/instrument events occurred during this week:

- On day 183, the 64th momentum dump was executed successfully at 2000z, which imparted a delta V of 0.081 m/sec.
- The average daily SSR playback volume for Behind was 4.8 Gbits during this week.